Acquisition Policy & International Trends

Overview

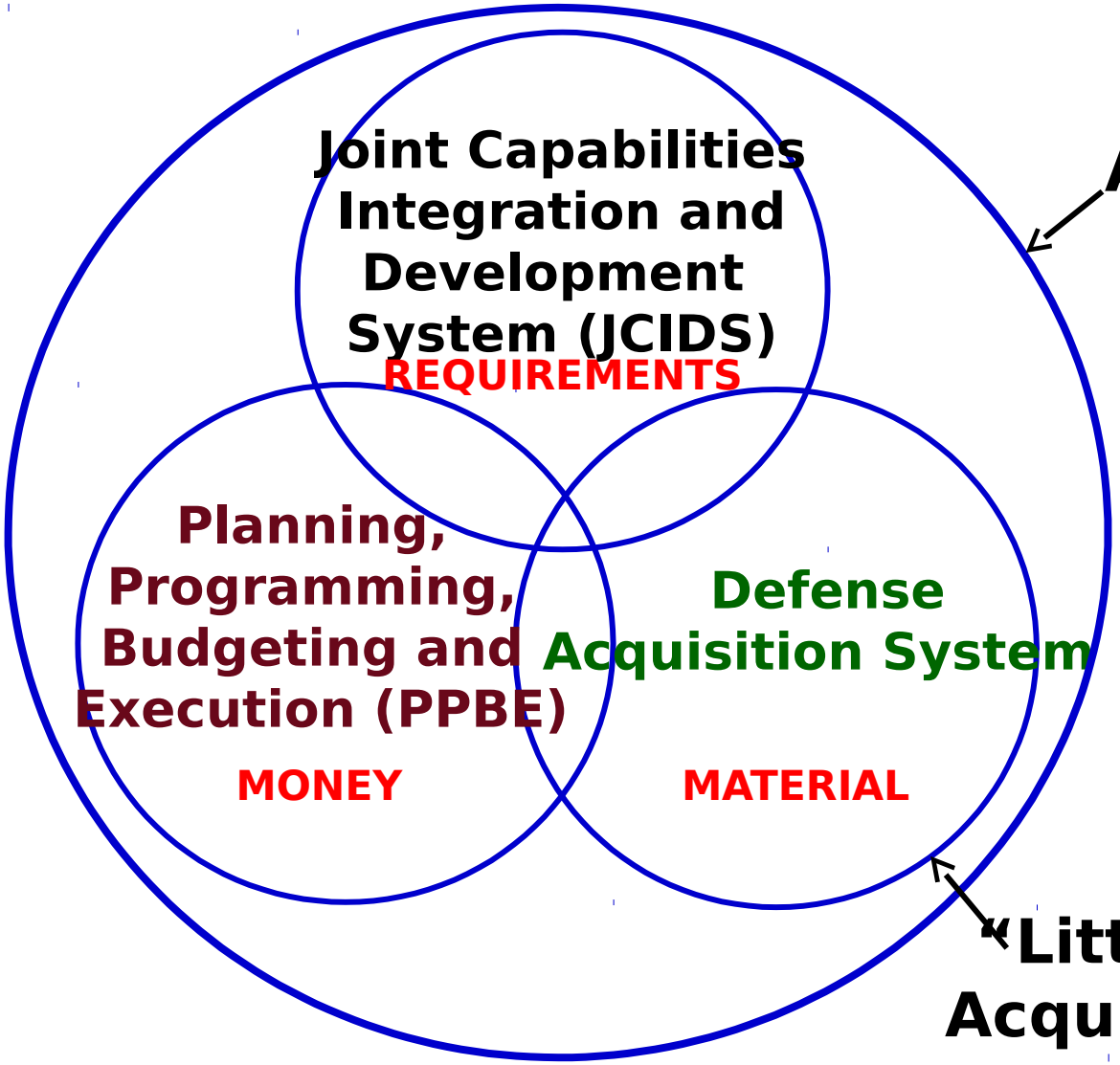
Defense Acquisition Basics

International Acquisition Policies

Sales, Cooperation, and Defense Trade Trends

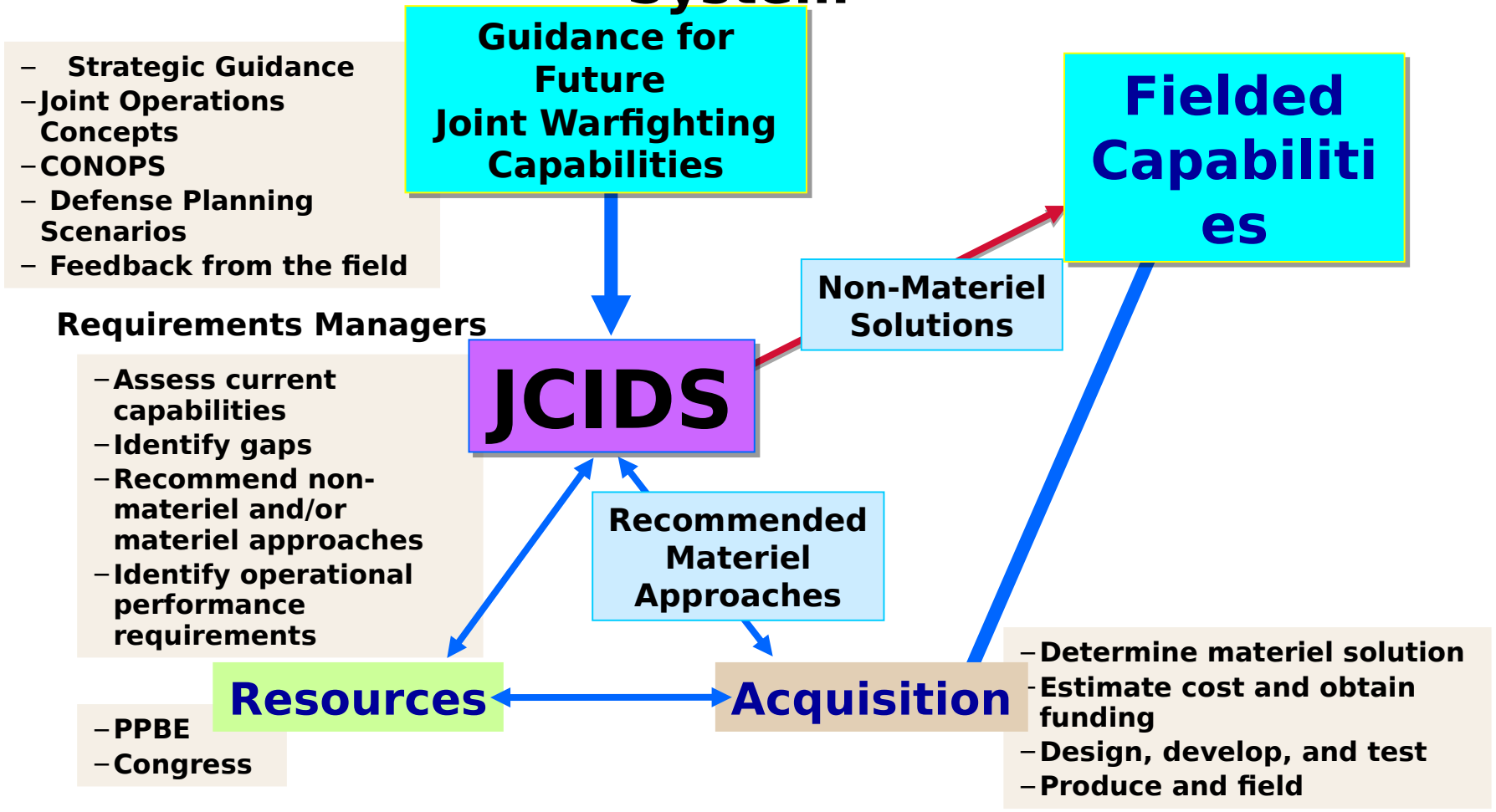
Program Trends

DoD Decision Support Systems



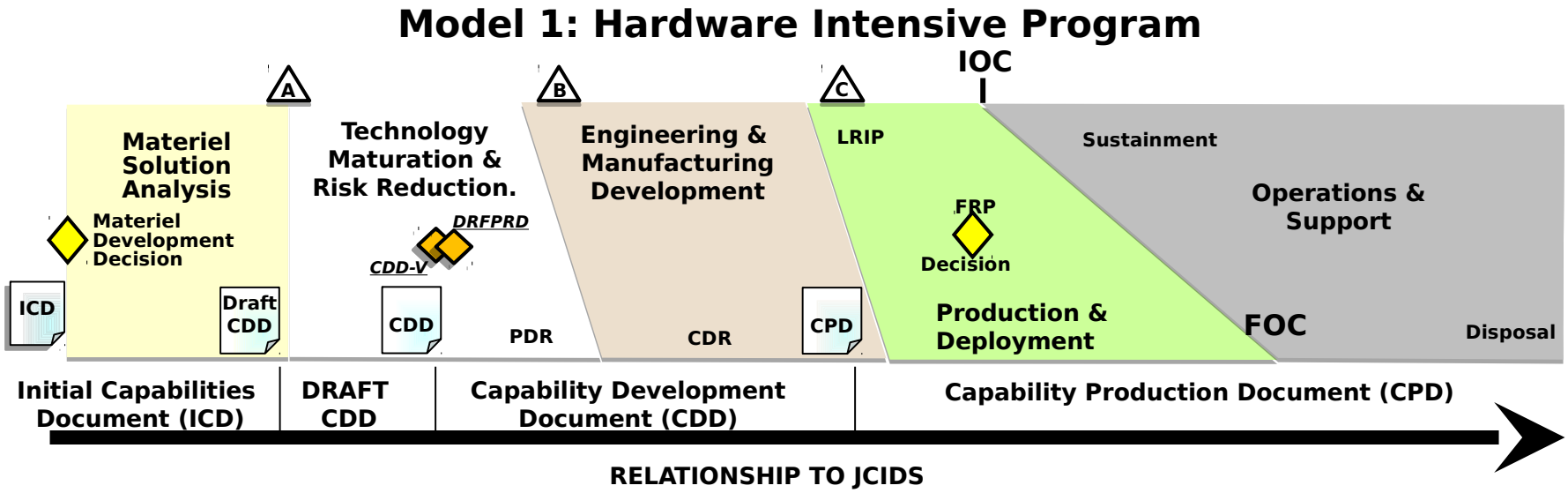
JCIDS – The Basics

Joint Capabilities Integration and Development System



Defense Acquisition System

- **The Materiel Development Decision precedes entry into any phase of the acquisition management system**
- **Entrance and Exit Criteria for each phase**



- PDR: Preliminary Design Review
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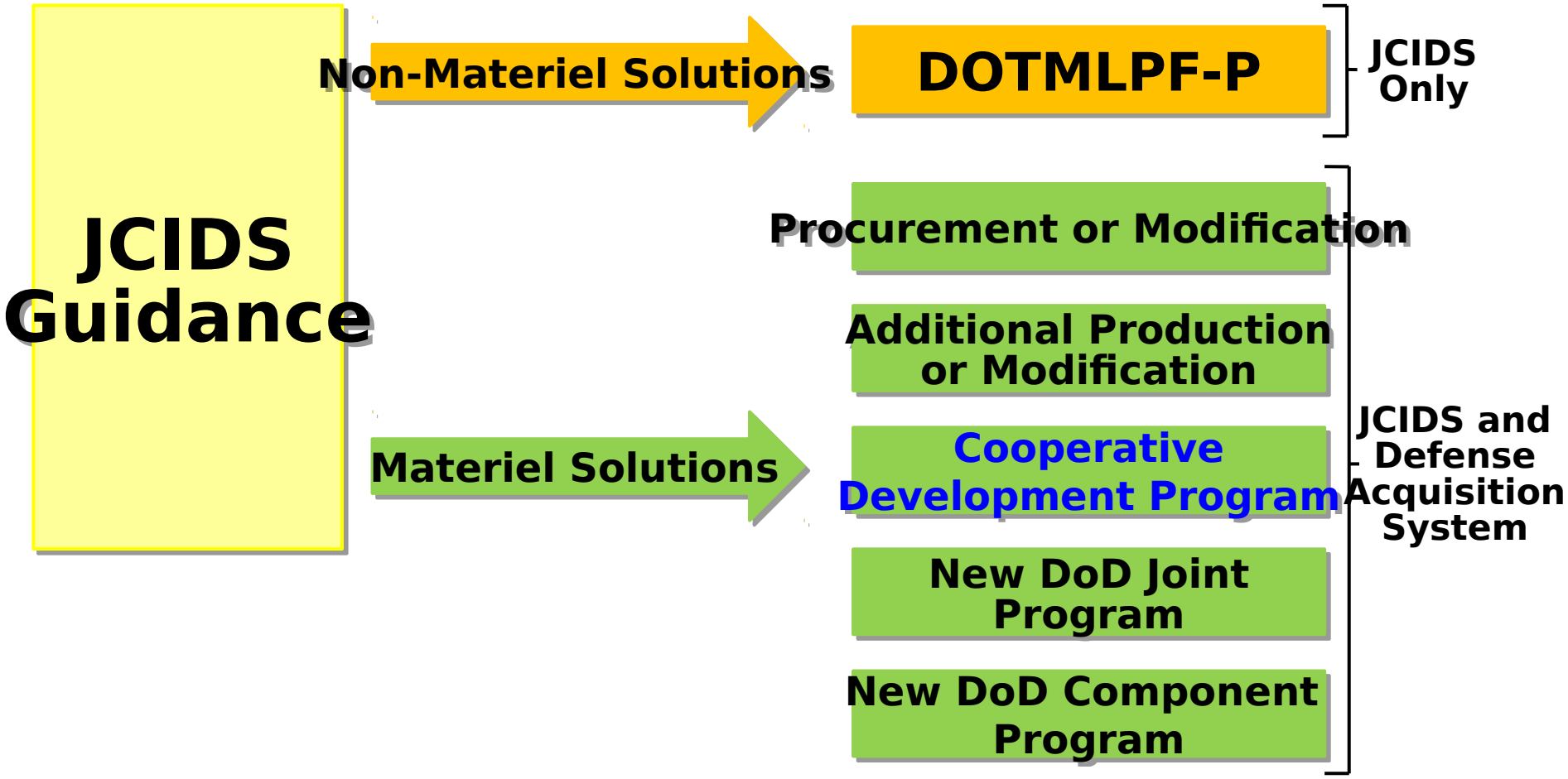
International Acquisition Policies

Preferred Order for Solutions



JCIDS Provisions

"For capability requirements documents advocating creation of international acquisition programs with allies/partner nations, Sponsors will consider to the greatest extent possible, foreign disclosure review and document structuring to facilitate releasability, in whole or in part, to the nations concerned."

"Other system attributes may include …… physical and operational security

JCIDS Manual (New in 2015 version)

Acquisition Strategy

"[Program Management [PM] is responsible for integrating [IA&E] considerations into the program's Acquisition Strategy at each major milestone or decision point. [PM] will consider the potential demand and likelihood of cooperative development or production, Direct Commercial Sales, or Foreign Military Sales early in the acquisition planning process; and consider U.S. export control laws, regulations, and DoD policy for international transfers when formulating and implementing the acquisition strategy … Where appropriate, [PMs] will pursue cooperative opportunities and international i

DoDI 5000.02 (Enclosure 2, paragraph 7.a.)

New

c **d**

Cooperative Opportunities

- **10 USC 2350(a) requires Cooperative Opportunities Document before 1st milestone or decision point**
- **Statutory Cooperative Opportunities requirement is addresses in DoDI 5000.02**
  - **Due at first program milestone review**
  - **Documented in Acquisition Strategy or equivalent document**
  - **Required for MDAP, MAIS, ACAT II & III**

DoDI 5000.02, Table 2 (Milestone and Phase Information Requirements), Page 47

Program Protection

"Program protection also supports international partnership building and cooperative opportunities objectives by enabling the export of capabilities without compromising underlying U.S. technology advantages."

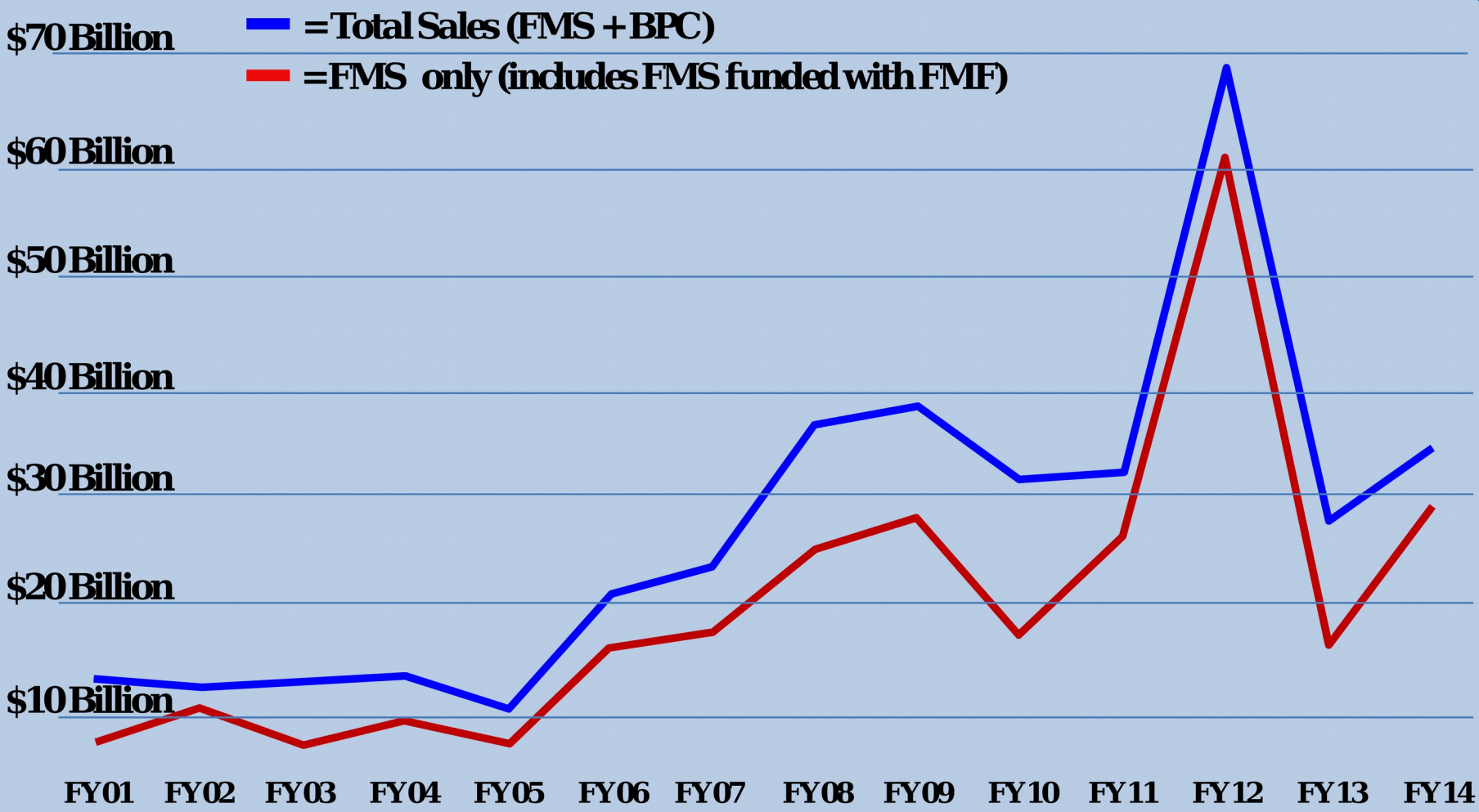
Program managers will describe in their PPP the program's critical program information and mission-critical functions and components … [including] planning for exportability and potential foreign involvement.

DoDI 5000.02 (Enclosure 3, paragraph 13)

New

Sales, Cooperation, and Defense Trade Trends

Adapting to a Changing Environment



The Scale of FMS

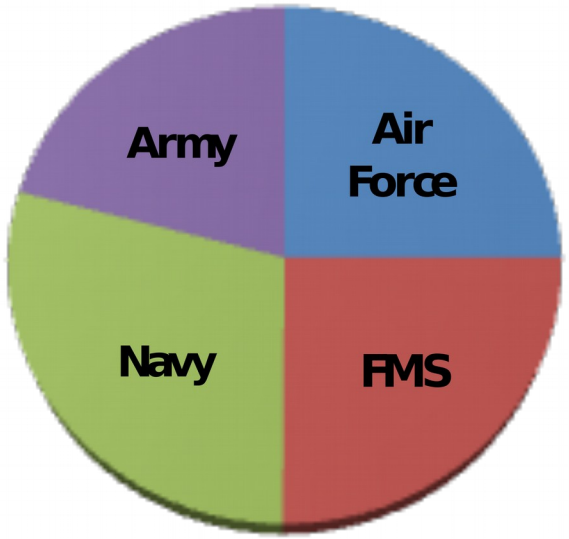
FMS and Service Procurement: 5 Year Average, FY10-14

#1. $45.1 Billion Navy
(incl. USMC)

#2. $39.0 Billion FMS

#3 $38.8 Billion Air Force

#4 $32.4 Billion Army

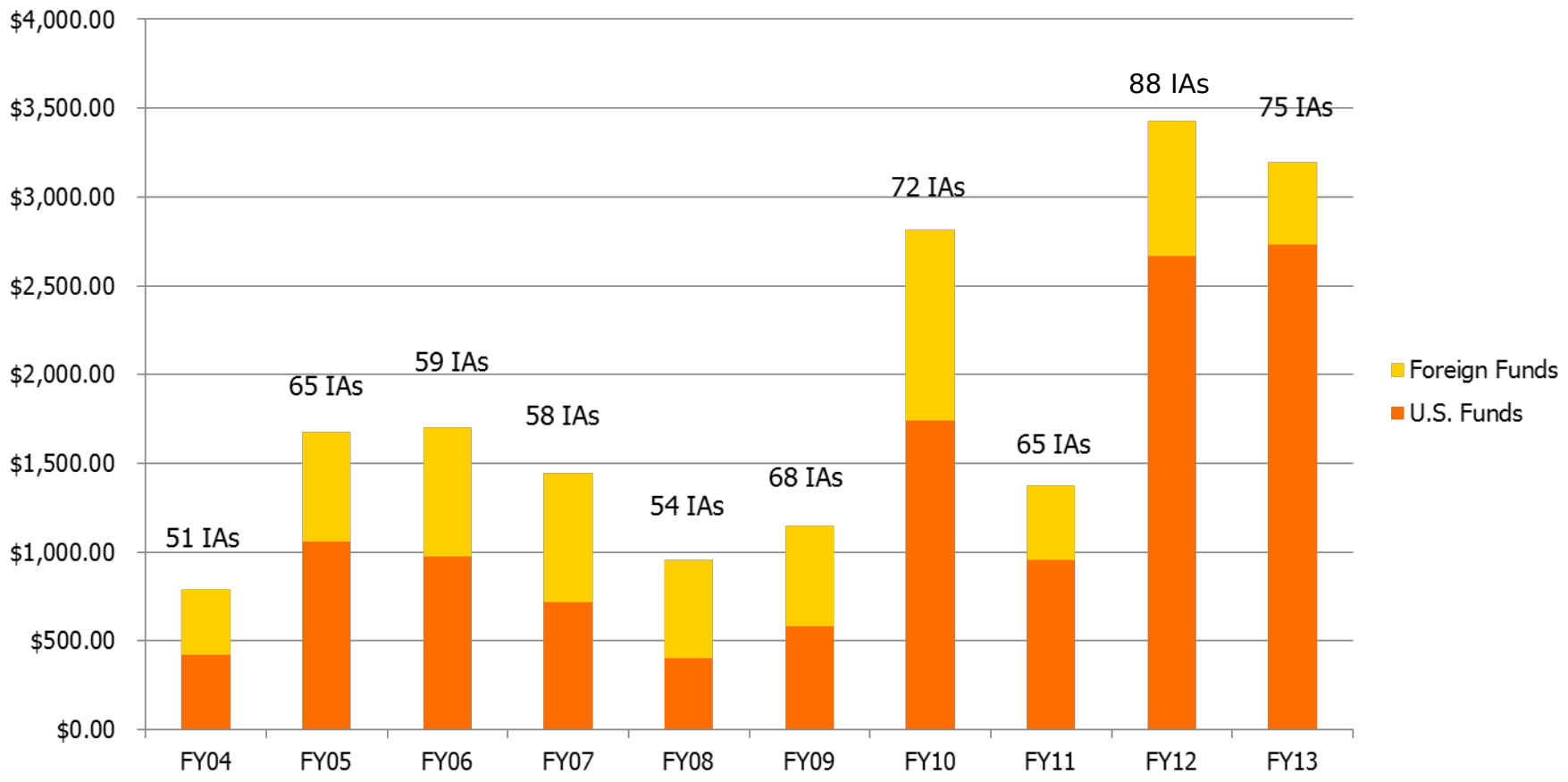


Benefits to the U.S.

- **Builds U.S.-partner relationships**
- **Interoperability**
- **Maintain production lines**
- **Dollars into the U.S. economy**
- **Jobs**

Agreement R&D Contributions

($ in Millions)



IA = International Agreement

Top 10 Arms Exporters & Importers (2001-2012)

Exporters	Importers
USA $86437	India $28776
Russia $74574	China $27875
Germany $22540	South Korea $13896
France $20829	UAE $11914
UK $12435	Pakistan $10430
China $9955	Australia $10365
Netherlands $6625	Greece $10286
Italy $6507	USA $9095
Israel $5997	Turkey $7962
Spain $5768	Singapore $7426

Source: Stockholm International Peace Research Institute (SIPRI) Arms Transfer Database (US$1990 millions)

Share of International Arms Exports (%)

	2009-2013	Top 3 Customers
USA	29	Australia, South Korea, UAE
Russia	27	India, China, Algeria
Germany	7	USA, Greece, Italy
China	6	Pakistan, Bangladesh, Myanmar
France	5	China, Morocco, Singapore
UK	4	Saudi Arabia, U.S., India
Spain	3	Norway, Austria, Venezuela
Ukraine	3	China, Pakistan, Russia
Italy	3	India, UAE, USA
Israel	2	India, Turkey, Columbia

Source: SIPRI Arms Transfer Database

Defense Companies - 2013
(World-Wide excluding China)

Rank	Company	Arms Sales, 2012, ($M)	Defense Sales % of Total Sales
1	Lockheed Martin (USA)	35,490	78
2	Boeing (USA)	30,700	35
3	BAE Systems (UK)	26,820	94
4	Raytheon (USA)	21,950	93
5	Northrop Grumman (USA)	20,200	82
6	General Dynamics (USA)	18,660	60
7	EADS (trans-European)*	15,740	20
8	United Technologies (USA)	10,560	19

ADS was renamed Airbus Group in January 2014

www.sipri.org

International Acquisition Program Trends

Program Trends

Foreign Military Sales (FMS)

- Sale of DoD Configuration with Exportability Modification
- Integration of Buyer Furnished Equipment (BFE)
- Development and Integration of New Equipment

Direct Commercial Sales

- Sale of DoD Configuration with Exportability Modification
- DCS/FMS Hybrid Programs
- Sale of New or Highly Modified Systems

International Cooperative Programs (ICPs)

- Cooperative Development of New Systems
- Incorporating Foreign Participation in DoD Programs
- Cooperation Throughout Programs' Life-Cycles

Past

Present

Joint Strike Fighter (JSF)

Program Description

- DoD requirement to replace the F-16, F-18, and AV-8B
- UK MoD joins as partner and accepts DoD's STOVL capability requirement
- Other partner nations follow

Foreign Military Sales

- Current FMS customers: Israel, Japan, Korea
- Future FMS customers: TBD
- Coordination of ICP and FMS customer investment in follow-on development anticipated

International Cooperative Programs

- Concept Demo MOUs (several)
- EMD MOU (U.S. and 8 partners)
- Production, Sustainment, and Follow-On Development

Combined Activities

- OT&E (selected partners)
- Training
  - Various "Training Pooling" Implementing Arrangements

RC-135V/W Rivet Joint

Program Description

- UK retires Nimrod R1; wants to retain SIGINT capability
- UK decides to “buy into” U.S. RJ program
- USAF provides three KC-135Rs as FDA

Foreign Military Sales

- FMS Case UK-D-SAO
- KC-135s converted to RC-135s
- Ground support equipment, spares, and training

International Cooperative Programs

- Sustainment & Follow-on Development (SFD) MOU
- Common logistics support
- Cooperative follow-on development

Combined Operations

- Co-Manning MOU
  - USAF to train UK cadre under FMS
- Cooperative Operations MOU
  - Framework for cooperative

Saudi Arabia F-15SA

Program Description

- $30B development, production, test, modification/conversion, and sustainment program
- Largest single FMS case in history

Program Structure

- PEO: AFLCMC/CC – PEO-FB
- Security Asst PM (SAPM) (WR)
- D-SAPM Production (WP)
- D-SAPM Conversion (WP)
- D-SAPM Sustainment (WP)
- D-SAPM Training (AFSAT)

Scope

- Production: 84 F-15SA new aircraft
- Conversion: 70 F-15S to SA's
- Sustainment: Construction/ modification at multiple

New Development

- Digital Electronic Warfare System
- Missile Warning System
- Fly-by-Wire flight controls
- Reconnaissance pod (DB-110)

P-8 Maritime Patrol Aircraft

Program Description

- Navy establishes a requirement to replace the P-3
- Full cooperative program with Australia, Germany, and Italy
  - attempted w/o success

DCS and FMS

- Current DCS Customer: India
- Current FMS Customers: None
- Future FMS Customers: TBD (but likely)

rnational Cooperative Program

- MOU w/Australia late in EMD
- Australia decides on combination of P-8 and Navy MQ-4C Triton
- Production, Sustainment, and Follow-On Development (PSFD) MOU w/Australia

Combined Activities

- Sustainment (logistics)
  - AUS will be treated as "13th Squadron" by Navy
- Follow-on development requirements definition
  - Australia

IA&E Policy Discussion

Allied and Coalition Partner Interoperability

- **Establish JCIDS attributes for equipment**

Acquisition Strategy

- **Integrate IA&E considerations at each milestone/decision point**

Program Protection Planning

- **Consider TSFD and exportability throughout life-cycle**

International Cooperative Programs (ICPs)

- **Consider partnership opportunities throughout life-cycle**

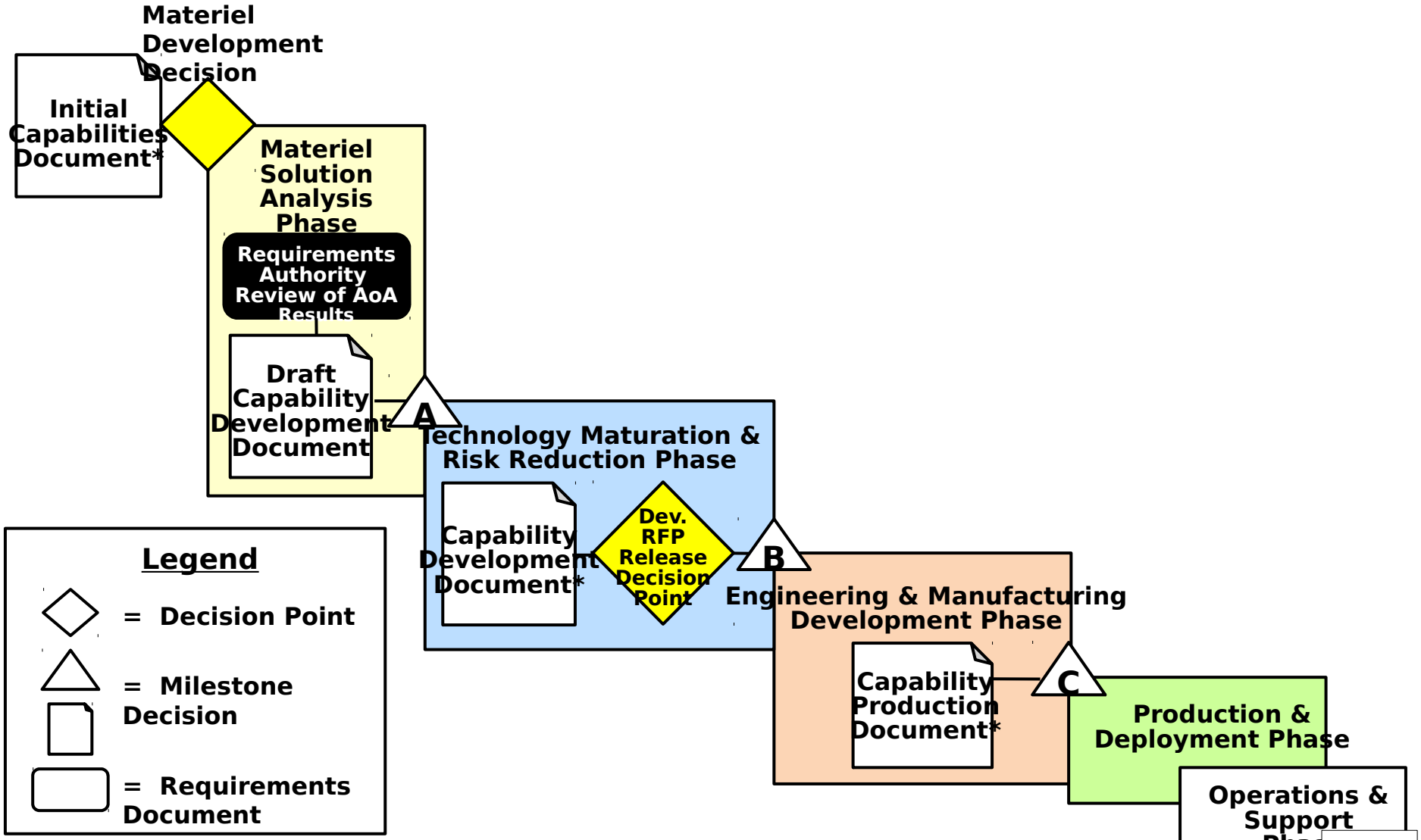
What's driving these policies?

Are they appropriate?

Are they

Handouts

Capability Requirement and Acquisition Processes



*equivalent Approved/Validated Requirements Document

JCIDS Documents

Initial Capabilities Document (ICD)

- Summarizes the Capability-Based Assessment
- Justifies requirement for materiel/non-materiel solutions
- Supports MDD for materiel solutions
- Guides M

Capability Development Document (CDD)

- Outlines an affordable increment of militarily useful, logistically supportable, technologically mature capability
- Draft CDD supports Milestone A "risk reduction" decision
- Matured during TMRR and validated at requirem
  Mileston

Capability Production Document (CPD)

- Addresses production elements specific to a single increment of an acquisition program
- Defines an increment that is ready for a production decision
- Guides the production and final testing of

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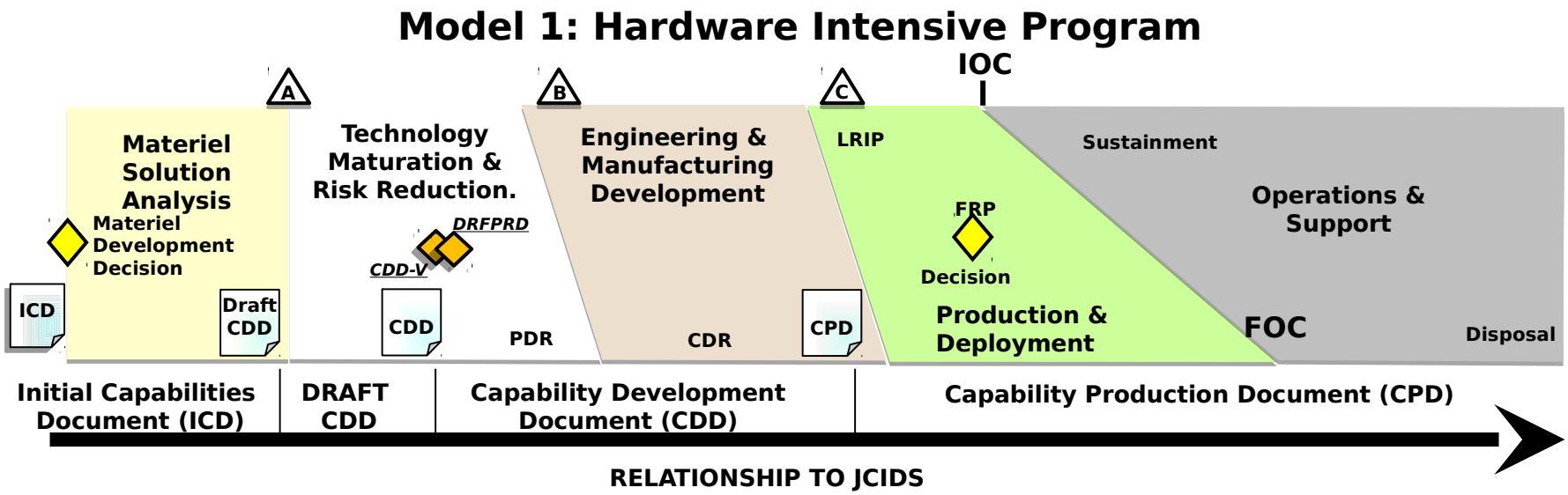

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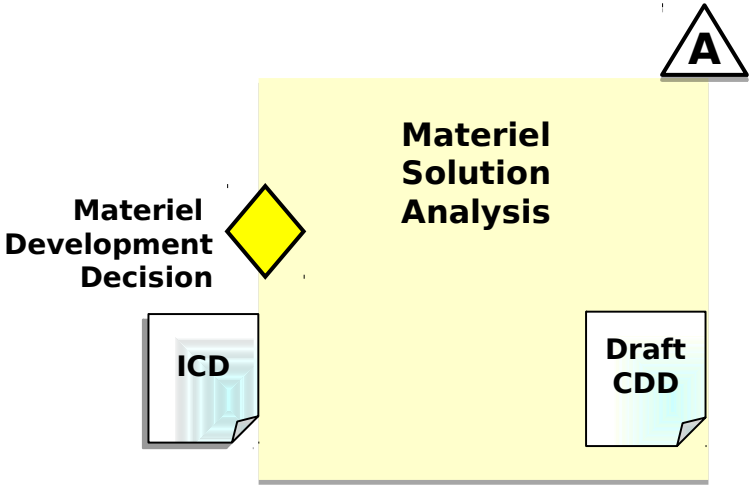
Materiel Solution Analysis

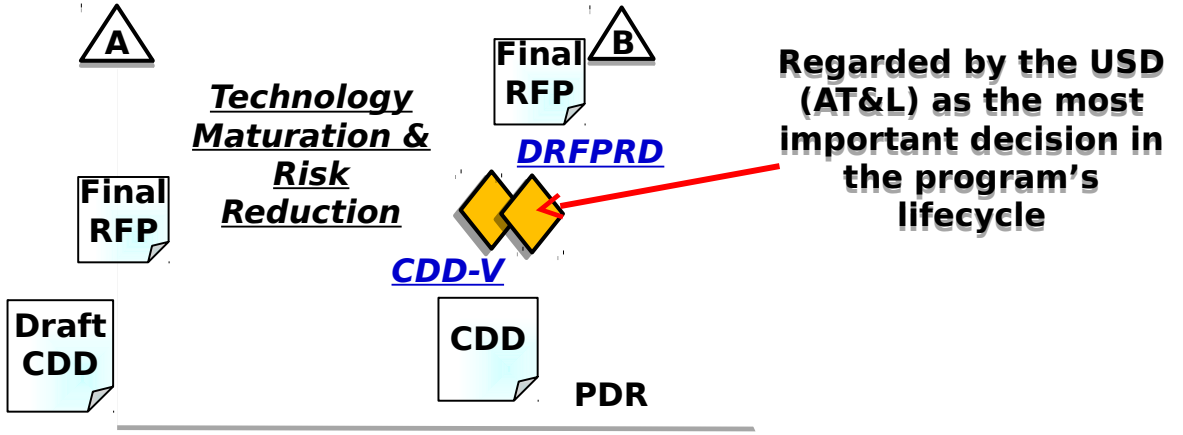
PURPOSE: to conduct the analysis and other activities needed to choose the concept for the product that will be acquired



- **ENTER: Approved ICD, study guidance for conducting the AoA, and an approved AoA plan. AoA study guidance for MDAPs and AoA plan approval will be provided by CAPE.**
- **ACTIVITIES: Establish PM & PMO, conduct AoA, user writes draft CDD, develop initial:**
  - **Acquisition Strategy**
  - **Test & Evaluation Master Plan (TEMP)**
  - **Systems Engineering Plan (SEP)**
  - **Life Cycle Sustainment Plan (LCSP)**
  - **Cyber Security Strategy**
  - **Program Protection Plan (PPP)**
- **GUIDED BY: ICD and AoA Plan**
- **EXIT: Completed the necessary analysis and activities to support a decision to proceed to the next decision point and desired phase in the acquisition process.**

Technology Maturation and Risk Reduction

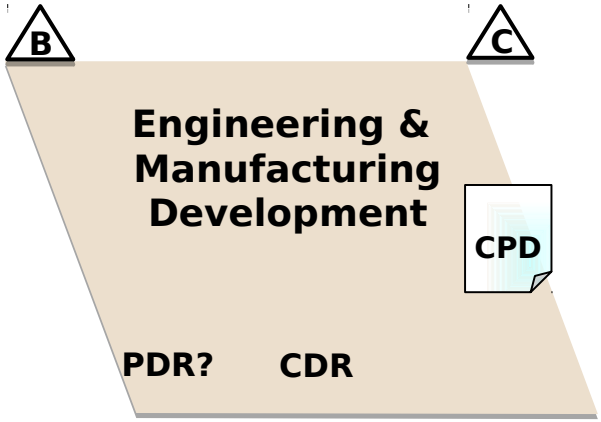
PURPOSE: to reduce technology, engineering, integration, and life cycle cost risk to the point that a decision to contract for EMD can be made with confidence



- **ENTER: MDA approved materiel solution and Acquisition Strategy, initial major program documentation and funding in the FYDP**
- **ACTIVITIES: Competitive prototyping of critical subsystems, SE trade-off analysis, develop contracting strategy, conduct CDD Validation, conduct Preliminary Design Review (PDR), conduct Development RFP Release Decision, begin source selection for EMD**
- **GUIDED BY: Acquisition Strategy and draft CDD/approved CDD**
- **EXIT: Demonstration that technology, engineering, integration, manufacturing, sustainment, and cost risks have been adequately mitigated to support a commitment to design for production, Validated capability requirements, full funding in the FYDP, and compliance with affordability goals for production and sustainment**

Engineering and Manufacturing Development

PURPOSE: to develop, build, and test a product to verify that all operational and derived requirements have been met and to support production or deployment



- **ENTER: Adequate risk reduction; approved requirements; full funding in FYDP**
- **ACTIVITIES: Complete detailed design, system-level CDR, integrated testing, establish product baseline, demonstrate manufacturing processes and supportability**
- **GUIDED BY: CDD, Acquisition Strategy, SEP, and TEMP**
- **COMPLETION:**

  (1) the design is stable;

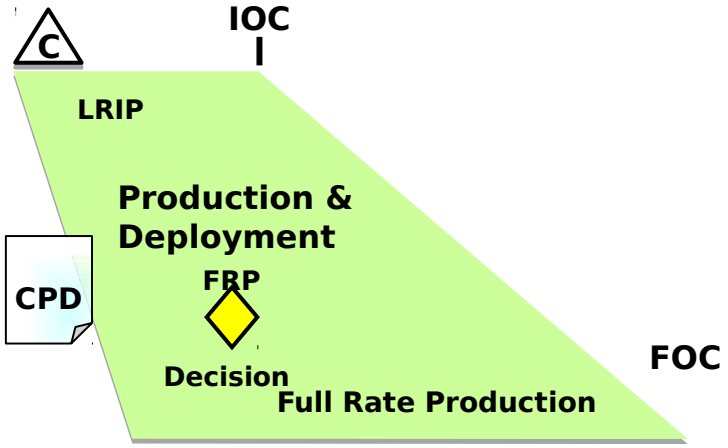
  (2) the system meets validated capability requirements demonstrated by developmental and initial operational testing as required in the TEMP;

  (3) manufacturing processes have been effectively demonstrated and are under control;

  (4) industrial production capabilities are reasonably available; and

Production and Deployment

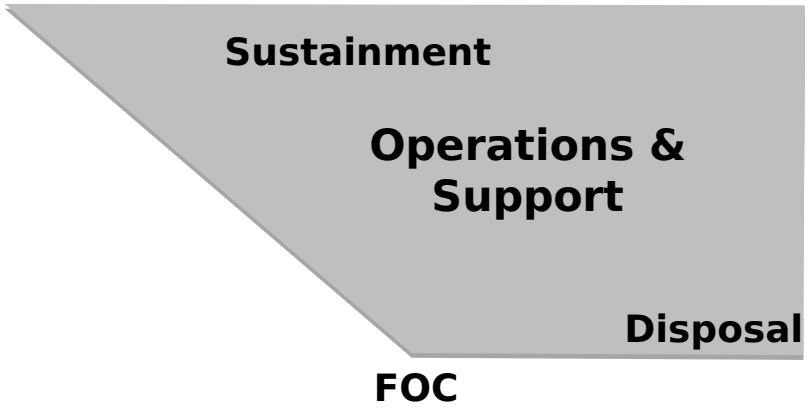
PURPOSE: to produce and deliver requirements-compliant products to receiving military organizations



- **ENTER: Acceptable performance in DT & Operational Assessments (OA); mature software; no significant manufacturing risks; approved CPD; acceptable interoperability and operational supportability; demonstration of affordability; fully funded**
- **ACTIVITIES: Low Rate Initial Production, IOT&E, LFT&E (if required) and interoperability testing of production-representative articles; Full-Rate Production Decision; fielding and support of fielded systems; IOC/FOC**
- **GUIDED BY: CPD, TEMP, SEP, LCSP**
- **EXIT: Full operational capability; deployment complete**

Operations and Support

PURPOSE: Execute a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-



- **ENTER: Approved CPD; approved LCSP; successful FRP Decision**
- **ACTIVITIES: LCSP implementation; Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management; initiate system modifications as necessary; continuing reviews of sustainment strategies, demilitarize and dispose of systems IAW legal and regulatory requirements, particularly environmental considerations and explosives safety**
- **GUIDED BY: CPD/Acquisition Strategy/LCSP**